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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/021,754  | 12/12/2001  | Behnam Behzadi       | RSTN-009            | 6296             |
| 30139   | 7590        | 09/28/2005           | EXAMINER            |                  |
| WILSON & HAM<br>2530 BERRYESSA ROAD<br>PMB: 348<br>SAN JOSE, CA 95132 |             |                      | SIDDIQI, MOHAMMAD A |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2154                |                  |

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/021,754

Applicant(s)

BEHZADI, BEHNAM

Examiner

Mohammad A. Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 4/28/03, 9/12/05, 12/12/01

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-25 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 2, 4, 9-12, 14, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Guo et al. (US publication 2002/0054405) (hereinafter Guo).

4. As per claim 1, Guo discloses a method for protecting a label switched path (LSP) between two label switch routers (LSRs) in a ring network that utilizes a label switching protocol to communicate packets of information, wherein each LSR in said ring network is connected to a right side neighbor

LSR and a left side neighbor LSR by respective links (bi-directional, fig 1, pages 1-2, paragraph #18 and 21-23) , said method comprising:

identifying a working LSP between first and second neighbor LSRs in said ring network, said working LSP having a first direction around said ring network (fig 2, page 2, paragraph #21 and 22);

establishing a protection LSP between said first and second neighbor LSRs (pairs of adjacent optical nodes, page 2, paragraph #20) for communicating packets between said first and second neighbor LSRs in the event of a failure of the link (page 3, paragraph #31) that is utilized by said working LSP, said protection LSP utilizing said ring network and having an opposite direction (clockwise and counter clockwise, page 2, paragraph #20) to said first direction (bi-directional, page 2, paragraph #20 –#22); and

switching packets from said working LSP to said protection LSP in response to a failure of said link (RESV message, page 3, paragraph #31) that is utilized by said working LSP direction (fig 1, bi-directional optical switched path, page 2, paragraph #20 –#22).

5. As per claim 2, Guo discloses switching packets from said protection LSP (page 2, paragraph #22) back to said working LSP after said packets have traversed (page 2, paragraph #22; #26-#27) said protection LSP (fig

2, page 1, paragraph #9-#13).

6. As per claim 4, Guo discloses switching packets from said working LSP to said protection LSP includes switching the label of a packet from a working label to a protection label (fig 2, page 1, paragraph #9-#13; page 2, paragraph #22; #26-#27).

7. As per claim 9, Guo discloses establishing at least one protection LSP for each link between neighbor LSRs on said ring network (page 2, paragraph #22; #26-27).

8. As per claim 10, Guo discloses LSRs utilize multiprotocol label switching (MPLS) to communicate packets around said ring network (page 2, paragraph #20; #22).

9. As per claim 11, the claim is rejected for the same reasons as claim 1, above.

10. As per claim 12, the claim is rejected for the same reasons as claims 11 and 2, above.

11. As per claim 14, the claim is rejected for the same reasons as claims 11 and 4, above.

12. As per claim 19, the claim is rejected for the same reasons as claims 11 and 9, above.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 3, 5-8, 13, 15-18, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo et al. (US publication 2002/0054405) (hereinafter Guo) in view of Chuah et al. (6,408,001) (hereinafter Chuah).

15. As per claim 3, Guo does not explicitly disclose switching packets from said protection LSP to a next hop working LSP after said packets have traversed said protection LSP. However, Chuah discloses switching packets

from said protection LSP to a next hop working LSP after said packets have traversed said protection LSP (640, fig 6, col 6, lines 62-67; col 7, lines 6-14). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Guo and Chuah. The motivation would have to provide quality of service in bi-directional Multi Protocol Label Switch (MPLS) network.

16. As per claim 5, the claim is rejected for the same reasons as claim 3, above. In addition, Chuah discloses switching packets (col 6, lines 43-61) from said working LSP to said protection LSP includes adjusting time-to-live (TTL) values of said packets to account for the number of LSRs that are along said protection LSP (640, fig 6, col 6, lines 62-67; col 7, lines 6-14).

17. As per claim 6, the claim is rejected for the same reasons as claim 3, above. In addition, Chuah discloses adjusting said TTL values includes adding N to said TTL values, where N is a function of the number of LSRs along said protection LSP (number of hops, 640, fig 6, col 6, lines 62-67; col 7, lines 6-14).

18. As per claim 7, the claim is rejected for the same reasons as claim 3, above. In addition, Chuah discloses switching packets (col 6, lines 43-61)

back to said working LSP from said protection LSP after said packets have traversed said protection LSP (only operable router, fig 5, col 5, lines 5-28); and using TTL values from packets that have traversed said protection LSP to generate TTL values for said packets that are switched back to said working LSP from said protection LSP (640, fig 6, col 6, lines 62-67; col 7, lines 6-14).

19. As per claim 8, the claim is rejected for the same reasons as claim 3, above. In addition, Chuah discloses switching packets (col 6, lines 43-61) from said protection LSP to a next hop working LSP after said packets have traversed said protection LSP (640, fig 6, col 6, lines 62-67; col 7, lines 6-14); and using TTL values from packets that have traversed said protection LSP to generate TTL values for said packets that are switched to said next hop working LSP from said protection LSP (640, fig 6, col 6, lines 62-67; col 7, lines 6-14).

20. As per claim 13, the claim is rejected for the same reasons as claim 3, above.



21. As per claim 15, the claim is rejected for the same reasons as claim 5, above.

22. As per claim 16, the claim is rejected for the same reasons as claim 6, above.

23. As per claim 17, the claim is rejected for the same reasons as claim 7, above.

24. As per claim 18, the claim is rejected for the same reasons as claim 8, above.

25. As per claim 20, Guo discloses A method for protecting a label switched path (LSP) between two label switch routers (LSRS) in a ring network that utilizes a label switching protocol to communicate packets of information, wherein each LSR in said ring network is connected to a right side neighbor LSR and a left side neighbor LSR by respective links (bi-directional, fig 1, pages 1-2, paragraph #18, #21-#23), said method comprising:

identifying a working LSP between first and second neighbor LSRs in said ring network, said working LSP having a first direction around said ring network (fig 2, page 2, paragraph #21, #22);

establishing a protection LSP between said first and second neighbor LSRs (pairs of adjacent optical nodes, page 2, paragraph #20) for communicating packets between said first and second neighbor LSRs in the event of a failure of the link (page 3, paragraph #31) that is utilized by said working LSP, said protection LSP utilizing LSRs on said ring network and having an opposite direction to said first direction (clockwise and counter clockwise, page 2, paragraph #20-#22);

switching packets from said working LSP to said protection LSP in response to a failure of said link that is utilized by said working LSP (RESV message, page 2, paragraph #20 -#22; page 3, paragraph #31); and Guo does not explicitly disclose adjusting TTL values of said switched packets by a value that is a function of the number of LSRs along said protection LSP. However, Chuah discloses adjusting TTL values of said switched packets by a value that is a function of the number of LSRs along said protection LSP Chuah discloses (number of hops, 640, fig 6, col 6, lines 62-67; col 7, lines 6-14). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of

Guo and Chuah. The motivation would have to provide quality of service in bi-directional Multi Protocol Label Switch (MPLS) network.

26. As per claim 21, the claim is rejected for the same reasons as claims 20 and 6, above.

27. As per claim 22, the claim is rejected for the same reasons as claims 20 and 7, above.

28. As per claim 23, the claim is rejected for the same reasons as claims 20 and 8, above.

29. As per claim 24, the claim is rejected for the same reasons as claim 20, above. In addition, Guo discloses establishing at least one protection LSP for each link between neighbor LSRs on said ring network (page 2, paragraph #22; #26-27).

30. As per claim 25, the claim is rejected for the same reasons as claim 20, above. In addition, Guo discloses LSRs utilize multiprotocol label switching (MPLS) to communicate packets around said ring network (page 2, paragraph #20; paragraph #22).

***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent 6,530,032 teaches fault recover method in a MPLS network.

U.S. Patent 6,862,288 teaches Circuit reestablishment in a MPLS network.

U.S. Patent 6,130,889

U.S. Publication 2003/0021225

U.S. Publication 2002/0109879

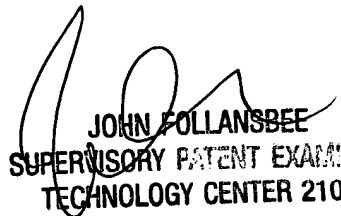
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32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A. Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

  
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